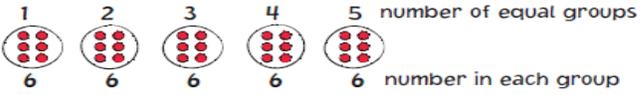
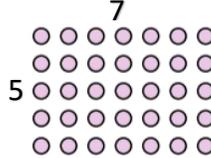
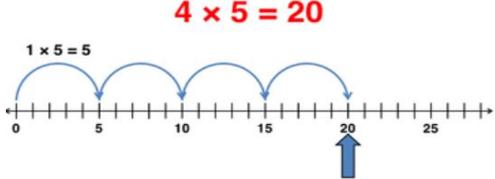
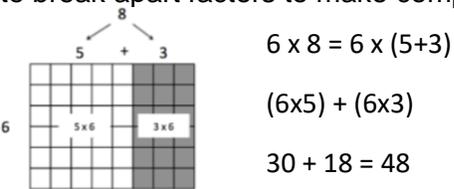
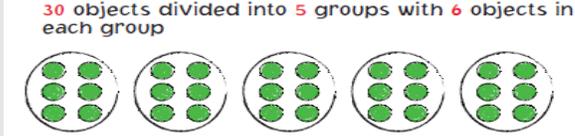


Math: Grade 3

Quarter	Math Understanding	The student can...	Support Information
1	Understand Multiplication	<p>*solve multiplication problems with products within 100.</p> <p>*solve multiplication problems by using equal groups, arrays, repeated addition, and number lines.</p>	<p>The product is an answer to a multiplication problem. The numbers being multiplied are called factors.</p> <p>Equal groups mean that each group has the same number of objects. For example, $5 \times 6 = 30$ can be shown as:</p> <p>5 groups with 6 objects in each group 30 objects</p>  <p>Arrays are arrangements that shows objects in columns and rows. For example, 5×7 can be shown as:</p>  <p>Repeated Addition is adding equal groups together. For example, 3×6 can be shown as adding 3 sixes: $6 + 6 + 6 = 18$</p> <p>Click HERE for a video on repeated addition.</p> <p>Number Lines are used to show jumps of equal size. For example, 4×5 is 4 jumps of 5:</p> 
1	Apply Multiplication Strategies	<p>*solve multiplication problems using mental strategies and properties of multiplication:</p> <p>the Commutative Property,</p> <p>the Associative Property, and</p> <p>the Distributive Property.</p>	<p>The Commutative Property is a math rule that says that the order in which we multiply numbers does not change the product. For example: 4×6 is the same as 6×4.</p> <p>Click HERE for a video on the Commutative Property.</p> <p>The Associative Property is a math rule that says the product of three or more numbers is the same regardless of how the numbers are grouped. For example, $(3 \times 4) \times 2 = 3 \times (4 \times 2)$.</p> <p>Click HERE for a video on the Associative Property.</p> <p>The Distributive Property is a math rule that allows us to break apart factors to make computing easier.</p>  <p>Click HERE for a video on the Distributive Property.</p>

2	Understand Division	*solve division problems with dividends within 100.	<p>The dividend is a number that is divided by another number called the divisor. The quotient is the answer to a division problem.</p>  <p>Divide means to separate into equal groups.</p> 
2	Solve Multiplication & Division Problems	*understand the relationship between multiplication and division.	<p>Students are encouraged to use what they know about multiplication to solve division problems.</p> <p>Think Multiply to Divide</p> $15 \div 5 = \square$ $5 \times \boxed{3} = 15$ $15 \div 5 = \boxed{3}$ <p>Related Facts, or a fact family, have the same three numbers in four equations. Two are multiplication and two are division. For example:</p> $8 \times 3 = 24$ $3 \times 8 = 24$ $24 \div 8 = 3$ $24 \div 3 = 8$ <p>Click HERE for a video on related facts.</p>
3	Solve Addition & Subtraction Problems Within 1,000	*solve addition and subtraction problems using place value strategies and the standard algorithm .	<p>Use place value to break numbers apart to make adding easier. For example, $248 + 345$ can be solved as:</p> $\begin{array}{r} 248 = 200 + 40 + 8 \\ + 345 = 300 + 40 + 5 \\ \hline = 500 + 80 + 13 = 593 \end{array}$ <p>This is also called using the expanded form to add.</p> <p>Use place value to break numbers apart to make subtracting easier. For example:</p> $\begin{array}{r} 578 = 500 + 70 + 8 \\ -243 = 200 + 40 + 3 \\ \hline = 300 + 30 + 5 = 335 \end{array}$ <p>This is also called using the expanded form to subtract.</p> <p>Standard Algorithms are the traditional rules used to add and subtract.</p> <p>Click HERE for a video explaining the Standard Algorithm for addition.</p> <p>Click HERE for a video explaining how place value relates to the Standard Algorithm for subtraction.</p>

<p>3</p>	<p>Understand Fractions</p>	<ul style="list-style-type: none"> *understand a fraction tells about parts of a whole. *understand whole numbers as fractions. *recognize fractions greater than 1. *express fractions greater than 1 as a mixed number. 	<p>A fraction is a number that names part of a whole or part of a group.</p> <p>The numerator is the part of a fraction above the line, which tells how many equal parts are being counted.</p> <p>The denominator is the quantity below the line in a fraction, which tells how many equal parts there are in the whole or in the group.</p> <p>$\frac{1}{4}$ of the square is shaded blue.</p> <p>$\frac{1}{3}$ of the circles are red.</p> <p>A unit fraction is any fraction with a numerator of 1. Students count by unit fractions and show them on a number line, understanding whole numbers as fractions (ie $\frac{4}{4} = 1$; $\frac{8}{4} = 2$).</p> <p>A fraction greater than 1 is a number that has a numerator that is greater than its denominator.</p> <p>A fraction greater than 1 can also be expressed as a mixed number. A mixed number is a number greater than 1 written as a whole number and a fraction.</p>
<p>3</p>	<p>Compare & Understand Equivalent Fractions</p>	<ul style="list-style-type: none"> *use benchmark fractions to identify if one fraction is greater than, less than, or equal to another fraction. *compare fractions with the same numerators or the same denominators. *name equivalent fractions. 	<p>A benchmark is a common fraction that is used as reference to compare two fractions. If one fraction is less than the benchmark and a second fraction is greater, the first fraction is less than the second.</p> <p>Click HERE to see a video on how the compare fractions using the benchmark of one-half.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="812 1381 1177 1722"> <p>Compare fractions with the same denominator.</p> </div> <div data-bbox="1193 1381 1550 1722"> <p>Compare fractions with the same numerator.</p> </div> </div> <p>Click HERE to see a video on comparing fractions with the same denominator or the same numerator.</p> <p>Equivalent fractions have the same value, even though they may look different. They are fractions that name the same amount or part.</p> <p>Click HERE for a video on comparing equivalent fractions visually and on a number line.</p>

4	Understand Time & Elapsed Time	<p>*tell time to the nearest minute.</p> <p>*use a number line to solve problems with elapsed time.</p>
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Elapsed time is the amount of time that passes from the start of an activity to the end of an activity.

Start time: 2:10

End time: 2:48

20 min + 15 min + 3 min

Elapsed time: 38 minutes

Click [HERE](#) for a video on using a number line to calculate elapsed time.

4	Represent & Interpret Data	<p>*understand data presented on bar graphs and/or picture graphs.</p>
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Picture Graphs

Number of Fish	
Tammy	
Malik	
Berta	
Eric	

Key: Each stands for 1 fish.

Bar Graphs

Name	Number of Shells
Ivy	6
Liam	5
Janson	7
Kelly	9